Info-ParaNet Newsletters Volume I Number 514

Friday, December 20th 1991

Today's Topics:

Jerry Clark/Jacques Vallee/Revelations
Clark/Vallee/Revelations - Part 2
Vallee Responds
300,000 year-old human remains in Brazil: a caution
Re: Mutilated Cattle 1/
Ray Stanford's Address
Missing Mystery Object 1991VG
This 'UFO' magazine that you are all discussing ...

Moderator's Note: This will be the last issue until the first week in Jan. 92 I don't want to fill any mailboxes up this year.
Ohmahkah hoehyahpe haydonhon Wah Shoongtokcha, Noopah Mahtohs hayhon ohwahs'eenah ohyahteh k'chee Alpha C. D. Corp.
Season Greating from Snow Wolf, Two Bears and all the people with Alpha C. D. Corp.

From: Michael.Corbin@p0.f428.n104.z1.FIDONET.ORG (Michael Corbin)
Subject: Jerry Clark/Jacques Vallee/Revelations
Date: 15 Dec 91 17:48:00 GMT

Recently, Jacques Vallee published his latest book, Revelations. Sure to create a stir within the ufological community, Jerry Clark, editor of the IUR, reviewed Jacques' book. Below, we have reprinted the article Jerry wrote, and following this, we have reprinted a rebuttal which Jacques has provided.

Editorial

SOMEBODY MUST BE BEHIND IT

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From September/October 1991, Volume 16, Number 5.

On September 7 and 8, at a conference in Sydney, Australia, I delivered a two-part lecture which dealt in part with conspiracy theories in historical and current ufology. After the first lecture a woman approached me to say that she would have to listen to the second before deciding whether or not I am a CIA agent. In the middle of that final lecture, as I was making light of Milton William Cooper's leave-your-brains-at-the-door-and-believe yarns about a secret government and its alliance with malevolent extraterrestrials, a man in the audience began shouting and demanding that I shut up.

Another lecturer, our old friend Bill Chalker, was asked during the question-and-answer session if it was true that he works for the CIA. I thought this was pretty funny, but Chalker was not amused. He told me later that the charge was being made, indeed had even been published, by Australia's Cooperists; what concerned him was the possibility that witnesses in future UFO cases might hear of it and refuse to speak with him--certainly a legitimate concern.

Conspiracy delirium has afflicted Australia, though the illness seems to have been contracted by exposure, I am sorry to say, to my own country. It's not just that the writings of Cooper and John Lear circulate widely within the New Age community, but an expatriate American who claims to be an "escapee from the CIA" (as someone described him to me) feeds the paranoia with his own stories, for which as always no supporting evidence is forthcoming. In our time it is secret documents one has seen, rather than Space Brothers one has met, that comprise the stuff of fantasies and hoaxes.

Not, of course, that conspiracy obsessions are ufodom's alone. Not by a long shot. As a news junkie I wake up every morning and switch on cable television's C-Span, which hosts a show on which politicians, officials, pundits, and journalists take calls from viewers. The subject, of course, is never UFOs, but on some days as many as one caller in three seems to subscribe to some variety of conspiracy theory. Now that Communism, happily, is fading from the world scene and so, incidentally, from a leading role in conspiratorial scenarios, the principal suspects have become the CIA (the focus of all evil in the solar system, as we all know), "the media" (believed to be a monolithic entity with, in one caller's words, a "definite agenda"-which is to promote the interests of, depending on who's on the phone, the right or the left end of the political spectrum), and the Israelis (or, as some callers unsubtly express it, thereby tipping us off to their real views, "the Jews").

I happened to remark on the peculiar proliferation of conspiracy beliefs in a conversation with Barry Williams and Tim Mendham, two genial representatives of Australian Skeptics, down under's equivalent of CSICOP. Affecting a darkly conspiratorial expression, Mendham declared, "Somebody must be behind it!" Mendham's wisecrack came back to me as I was reading Jacques Vallee's new Revelations: Alien Contact and Human Deception (Ballantine Books), the ultimate conspiracy book. Vallee's thesis can be summed up thus: Conspirators are inventing conspiracy theories to mask the real conspiracy.

Revelations is a sequel to Vallee's 1979 book Messengers of Deception, which proposed that a shadowy group of intelligence operatives is manipulating UFO beliefs and creating phony UFO encounters in an effort to direct societal consciousness. An early, less elaborate version of this notion was circulated in the 1950s and 1960s by a former government scientist, Leon Davidson. Davidson thought that CIA psychological-warfare specialists posing as space people had fooled George Adamski and other contactees. In Messengers Vallee advances essentially the same idea, though without crediting Davidson; also, unlike

Davidson, he believes that a real UFO phenomenon, supernatural, perhaps unknowable, but certainly not extraterrestrial, exists beyond the manipulation.

In common with his other works of the last two decades, Revelations is an interesting book even if it is not a good one. Vallee is no profound thinker, but no one would deny that he is a first-rate storyteller. Anyone who enjoys tales from the fringes-and who doesn't?-will have great fun with the chapters on UMMO and on Franck Fontaine's bogus abduction. Vallee's deadpan account of his dinner with Bill Cooper is hilarious. And he shows admirable good sense when he takes after paranoid ufologists' traditional anxieties about tapped phones and CIA assassinations of those who know too much about flying saucers.

What he himself believes, alas, is hardly less crazy. Much of his problem is that he has a hard time entirely disbelieving anybody. To Vallee even those whom others have had no trouble identifying as crude charlatans are "sincere." To those who do not see a conspiracy everywhere, it is quite easy to accept that somebody might peddle tales of man-eating aliens--or of Space Brothers or of ETs in our midst-simply to fatten the bank account, to gratify the ego, to fool the gullible, or to feed any other unworthy but recognizable human impulse. There is no reason, logically or evidentially, to suspect these hoaxers are some other hoaxer's victims. But if one wishes, with Vallee, to indulge in conspiratorial musings, then the contactees and the Cooperists really had an experience (with actors in alien outfits) or really saw a secret document (contrived for disinformation purposes), even if to get there one has to ignore clear and specific evidence that the claimants are lying through their teeth.

<<Continued in next message..>>

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Michael Corbin - via FidoNet node 1:104/422
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INTERNET: Michael.Corbin@p0.f428.n104.z1.FIDONET.ORG

From: Michael.Corbin@p0.f428.n104.z1.FIDONET.ORG (Michael Corbin)
Subject: Clark/Vallee/Revelations - Part 2
Date: 15 Dec 91 17:49:00 GMT

<<..Continued from previous message>>

Vallee drags the Cergy-Pontoise tale--a confessed hoax yet-into the conspiracy. In this instance, he writes, the agents were "beings of flesh and blood within the French military and technological establishment." How does Vallee know this? He has it from a nameless source who claims to have spoken with an

anonymous bureaucrat in the French Ministry of Defense.

This, by the way, is the same Vallee who complains (on page 76) of Len Stringfield's habit of citing anonymous sources. Yet anonymous sources, making claims in some ways as incredible as those who tell Stringfield of crashed saucers and extraterrestrial autopsies, abound in Revelation's pages. Some instances: (1) "[A]ntiterrorist exercises in which the attackers disguised their craft as a flying saucer have actually been run more than once," which explains cases cited by "amateur groups" as "proof that extraterrestrials are surveying our strategic assets." Source: "men who were trained in the penetration of nuclear plants and missile bases," none named. (2) There is evidence that the "UMMO group" is linked with the "LaRouche extremist movement in France." Source: "French investigators," none named. (3) During Desert One, the failed April 1980 attempt to rescue American hostages in Iran, a "disk resembling a UFO" was seen. "It was said to be a platform for nonlethal weapons, intended to paralyze or otherwise disable the Iranian guards." The "code word for that part of the operation, of which Richard Secord and Oliver North had been among the planners, was none other than Snowbird," a name that appears in recent UFO-conspiracy lore. Source: "some witnesses," none named.

Even as he complains of "eager believers [who] have fabricated fanciful explanations out of whole cloth," he breathlessly spins theories out of what appears to be the same material. He enlists UMMO in the conspiracy, even as he mentions in passing the more prosaic findings of two Spanish investigators (actually named) who have uncovered evidence suggesting the supposedly extraterrestrial writings were forged by individuals (also named) associated with a Spanish contactee group. Poor Carl Meredith Allen (aka Carlos Miguel Allende) is resurrected from the Saucerian boneyard, and we are to believe that Morris K. Jessup's suicide was in some way-here as elsewhere in the text Vallee is vague on details connected with the conspiracy. In fact, from every available indication Jessup's suicide, like James McDonald's, had nothing to do with his UFO interests and everything to do with his personal problems. As for Allen, if Vallee had read Robert A. Goerman's article in the October 1980 issue of Fate--evidently he has never heard of it-we would have been spared this further exploitation of this sad character.

Vallee is brought to Norton Air Force Base to learn UFO "secrets" from two men whom even he recognizes as no more than naive saucer buffs. Yet when one tells of a desert meeting with a landed UFO some years earlier, Vallee cannot resist speculating that the occupants were American agents of the conspiracy- He does not think to ask why the U.S. government would go to the considerable trouble and expense of building an advanced aircraft and training pilots to act like space people simply to dazzle one obscure individual who would never publicize the experience.

I suppose that something like this would happen, but if we are to believe it did, Vallee will have to produce the relevant evidence. But evidence is the one element most conspicuously missing here--as, one might add, in all UFO-conspiracy literature. In the end, though he is sincerer and saner than most

other current conspiracy theorists, he gives us no more reason to believe him than they do. Vallee has little to offer beyond unnamed informants and a ufological revisionism which offers us speculation and imagination in place of reason and substance. There is nothing remotely like the documentation a true investigative journalist would have nailed down before he wrote a book as loaded with bizarre and implausible allegations as Vallee's.

According to Vallee, UFO beliefs are so spiritually charged that they are actually changing society, and that is why the conspirators use them to manipulate us to some end or other about which Vallee is characteristically obscure. In fact, UFOs were trivialized and marginalized long ago, and outside ufology, which Vallee apparently has mistaken for the real world, they are visible, and even there not consistently so, mostly in popular culture, along with rap music, soap operas, supermarket tabloids, miniskirts, and other ephemera. As a vehicle for social transformation UFOs are just about the last thing any sane conspirator would choose.

A more interesting question is why and how a phenomenon potentially so significant has come to appear to most people to be of no consequence whatever. Maybe that's where we'll uncover the conspiratorial machinations, if we are determined to find them. Other, less sinister explanations come to mind, however, and some can be found in less exciting but more intellectually fulfilling books and papers by sociologists of science.

Of course, if we were to follow the logic of Vallee's argument, why confine the conspiracy to the UFO era? If we don't let a dearth of evidence for a conspiracy stop us, there is no stopping us. What is to keep us from concluding, for example, that Richard Shaver was not a nut, as generally assumed, but the victim of a mind-control experiment which led him to believe he met alien creatures underneath the earth in the 1930s and 1940s? And what about 19th-Century Spiritualist mediums? Were they, too, victims of the conspiracy? After all, Spiritualism had a far more marked effect on Victorian culture than flying saucers have had on our own. A medium is even said to have encouraged President Lincoln to emancipate the slaves.

But if one has no compelling desire to drop into a black hole of unreason, one can but reflect that hoaxes, delusions, visions, and strange occurrences have always been a part of human experience, and since the UFO era has been lived by human beings, why should we expect it to be different? Why should not weird tales circulate in our time? In the absence of evidence, conspiracy theories of the sort Vallee proposes simply are unnecessary.

And yet, from time to time, Vallee touches on real issues. The Holloman Air Force Base affair, which concerns an apparently real film of what is supposed to be a meeting between government scientists and aliens, is a puzzle. So are the Bennewitz episode, the MJ-12 briefing document, and related matters. Vallee is surely correct, though he is hardly the first so to argue, that these amount to evidence both of a strange psychological warfare experiment and (at least where Bennewitz is concerned) of

egregious official misconduct. But to extrapolate a massive conspiracy from these small elements is simply to excuse oneself from the ranks of those who have a serious claim on our attention.

Throughout the text Vallee vents his spleen, as he did in his previous book Confrontations, on those ufologists who perversely insist on thinking for themselves even in the face of his repeated offers to do it for them. His books could as well be subtitled "Me Jacques; You Dumb." As always he displays minimal understanding of ufologists and their concerns. Sooner or later the alert reader will notice that hardly any of those unnamed "believers" and "amateurs" ever actually get quoted. Vallee prefers to set up and knock down straw arguments, always easier to do than to address the concerns of ufology's serious (as opposed to naive or cracked) researchers and theorists.

From all indications he still has not read Thomas E. Bullard on the patterns in abduction reports or Michael D. Swords on the scientific soundness of the extraterrestrial hypothesis. No one familiar with UFO Crash at Roswell or The Roswell Report will feel Vallee has contributed anything to rational discourse on that subject. Vallee continues to ignore the many nontrivial criticisms of his approach I outlined in "The Thickets of Magonia" (IUR, January/February 1990). He has simply cranked up the volume as he declaims yet again what is less a scientific reading of the phenomenon than an occult one. Let us not forget that Magonia, the word Vallee made famous, translates as "Magicland."

Errors large and small litter the pages of Revelations, evincing Vallee's ignorance of any ufology but his own. Donald Keyhoe did not write The UFO Conspiracy, nor is Timothy Good the author of something called Beyond Top Secret. Benton Jamison is not "Benton Majison," and Detlev Bronk's first name was not "Detley." (For that matter, Leo Tolstoy's was not "Leon.") And whatever else page 216 would have you believe, CUFOS left Evanston, Illinois, years ago. Vallee's coverage of the crashed disc question is a disaster. He has the Ubatuba incident occurring in 1933 or 1934 when it is supposed to have taken place in 1951. He places the Spitzbergen event in May 1941-contemporary published accounts put it in the early 1950s, though it is almost certainly a hoax-and Dorothy Kilgallen is incorrectly identified as the source of the rumor. The celebrated Texas/Mexico incident is set in a year and location different from those its proponents have assigned it.

One assumes, however, that no error lies behind Vallee's pretense that the Journal of Scientific Exploration is the "only refereed publication in the field" of ufology. First, JSE is not a ufological periodical, though it publishes occasional papers on the subject, and second, as Vallee is well aware as a former JUFOS board member, CUFOS' Journal of UFO Studies is ufology's only "refereed publication." This is Vallee's way of responding to his critics.

There is more to be said, but enough is enough. Let us close with Vallee's own words:

"Mysteries that linger without solution for such a long time

are a powerful irritant to the mind; they tend to trigger wild speculation. When the very existence of the enigma is flatly denied by arrogant scientists who have not even taken the time to look at the data, when the government destroys or covers up the fact that its own employees have actually witnessed some of the best documented sightings, it is natural for speculations to turn into paranoia, and for research to become derailed by fantastic delusions.

"It is at this point that the very people who could help us in our investigations, namely the UFO researchers themselves, become caught up in their own need to believe in the most bizarre theories, for which not a shred of real proof exists."

Sadly, Vallee has no idea that he has just described himself.- Jerome Clark

PARANET FILE NAME: VALLEE.REB

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Michael Corbin - via FidoNet node 1:104/422
UUCP: !scicom!paranet!User_Name
INTERNET: Michael.Corbin@p0.f428.n104.z1.FIDONET.ORG

From: Michael.Corbin@p0.f428.n104.z1.FIDONET.ORG (Michael Corbin)
Subject: Vallee Responds
Date: 15 Dec 91 17:50:00 GMT

Author, Jacques Vallee, has sent a letter to ParaNet which is posted here for your information. Please note, it is (C) 1991 by Jacques Vallee.

A LETTER TO READERS OF 'REVELATIONS'

by Jacques Vallee

In the Sept/Oct. 91 issue of its magazine, known as IUR (the "International UFO Reporter"), the Center for UFO Studies has published a review of 'Revelations' signed by Jerome Clark. It claims that (1) the book contains errors in names and citations, (2) its summary of alleged crashes is "a disaster" because several dates are wrong, (3) it pays too much attention to claims that should be summarily dismissed as fraudulent, (4) it does not reveal the names of all sources and (5) it fails to quote ufologists with differing views.

These claims, except for the very first one, are false.

(1) I have relied too much on memory and I have occasionally fallen victim to typos. For instance, CUFOS has indeed moved to Chicago rather than staying a few miles away in Evanston. Dr. Bronk's first name should be spelled Detlev, not Detley (it is spelled correctly in the index). Two letters got inverted in Jamison's name and I did not catch it. And it is undoubtedly true that JUFOS (Journal of UFO Studies) is a refereed journal.

(2) Crash data are notoriously unreliable, as IUR itself has often pointed out. However my "1933 or 1934" date for Ubatuba was not a typo. Similarly, from the data I have I must stand by the quoted material of May 1947 for the Spitzbergen crash.

(3) It is true that I did not castigate the claims of John Lear, Bill Cooper and Bob Lazar as outright frauds. I believe that these men are wrong but I cannot conclude that they lie. Somebody is using Lazar. Somebody invented the MJ-12 documents. Somebody typed the papers that Richard Doty gave Linda Howe. I did not hesitate, on the other hand, to denounce the Meier case and the Ed Walters claims.

(4) I am being taken to task for suggesting that Len Stringfield should have revealed his source's names, then neglecting to publish my own. This is another bad faith argument. I have never implied that Mr. Stringfield should violate the trust of his informants by making their names public in a book, and I certainly will not be guilty of such a violation myself. In fact the very same issue of IUR prints an interesting article by Dr. Bruce Maccabee, hinting at unnamed informants. My argument with Mr. Stringfield's sources is that bona fides independent scientists have not been able to talk to them on a confidential basis. How do we know that we are simply dealing with another "Aviary?"

(5) As for the claim that the book fails to mention contrasting views, I believe it is equally unfounded. Many such researchers were cited verbatim. On page 216, I even quoted Jerome Clark's interview with the Hartford Courant, where he summarily dismissed the Voronezh case, one of the most important UFO events of the last ten years.

Signed

Jacques Vallee

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Michael Corbin - via FidoNet node 1:104/422
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INTERNET: Michael.Corbin@p0.f428.n104.z1.FIDONET.ORG

From: oxy.edu!yokatta
Subject: 300,000 year-old human remains in Brazil: a caution
Date: 16 Dec 91 08:13:01 GMT

From: yokatta@oxy.edu (Scott Littleton)

Re the purported discovery in Brazil of 300,000 year-old human remains, I would take it with a very large grain of salt. Although the earliest human migrations to this hemisphere probably began earlier than most archaeologists have heretofore suspected--that is, perhaps as early as

30,000 years ago--there is no evidence whatsoever to suggest that the New World played host to any pre-sapiens hominids. The Mojave site in question is most likely the one at Calico, near Barstow, at which the late Louis Leaky, of Olduvai Gorge fame, was convinced he'd unearthed crude tools dating from approximately 250,000 B.P. But he was unable to convince his peers that they were in fact artifacts. Indeed, after more than two decades of assiduous digging by a handful of dedicated true believers, led by Ruth Simpson, NO human remains of any kind have come to light.

Re theromluminescence, it's a thoroughly legitimate geophysical dating technique that has been used successfully to date some extremely ancient African fossils, human and otherwise. If in fact this technique were to yield a date in the 300,000 year range for human remains found in Brazil, we anthropologists would all be back at the old drawing board bright and early tomorrow morning. But I suspect that if this were the case, it would long since have been announced in NATURE. There would be no reason to suppress such a discovery. Of course, if it were associated in some way with the UFO phenomenon, the powers that be might well decide to cover it up, although I gather from the post that that is not the case.

Of more interest to Paranet might be the mounting evidence, based on mitochondrial DNA sequences from all over the planet, that ALL anatomically modern human beings (i.e., Homo sapiens sapiens) descend from a SINGLE female who lived in what is now the Kalahari desert around 150,000 years ago. Could our ubiquitous 'visitors,' as Strieber labels them, have had a hand in that? I have my doubts, as the bulk of the evidence (primarily mythological) I've collected so far points to an initial arrival shortly before the end of the Pleistocene (ca. 11-12,000 years ago)--long after Homo sapiens sapiens had managed to penetrate every major region of the Planet save for Antarctica. But it's something to think about.

Cheers,
Scott Littleton

From: John.Hrusovszky@f300.n238.z1.FIDONET.ORG (John Hrusovszky)
Subject: Re: Mutilated Cattle 1/
Date: 17 Dec 91 02:48:42 GMT

MC> Lake Villa Police Chief Al Copenharver said persons who killed the fir
MC> cow, a Black Angus beifer, left only its head behind. The rest of the
MC> carcases seemed to have been butchered by persons wanting meat,
MC> Copenhaver said.

MC> He said the second cow, a Holstein Beifer, looked as if it had been
MC> beaten to death. The animal's left ear had been severed and was not
MC> found, he said.

MC> "It was about that time that the story broke about some 20 persons
MC> disappearing in Oregon to await time to leave Earth on a spaceship," h
MC> said.

MC> They wanted the cheapest camping
MC> spots and seemed strapped for money. They were evasive and kept to
MC> themselves. My patrolmen said some of them used Biblical names."

Sounds like some sort of Religious cult who worship supposed aliens.
I'll bet there is some "leader" who is making a fortune on them in one
way or another.

--
John Hrusovszky - via FidoNet node 1:104/422
UUCP: !scicom!paranet!User_Name
INTERNET: John.Hrusovszky@f300.n238.z1.FIDONET.ORG

From: hpvclmd.vcd.hp.com!miked
Subject: Ray Stanford's Address
Date: 17 Dec 91 22:32:07 GMT

From: Mike Dobbs <miked@hpvclmd.vcd.hp.com>

Bill Chalker...

My father used to correspond with Ray quite regularly. I believe his address
is still:
  Ray Stanford
  P.O. Box 599
  College Park, Maryland 20740   USA

 Best Regards,

  Mike Dobbs   /   Internet: miked@vcd.hp.com

From: shemtaia.weeg.uiowa.edu!jrblack
Subject: Missing Mystery Object 1991VG
Date: 18 Dec 91 02:41:57 GMT

From: James Roger Black <jrblack@shemtaia.weeg.uiowa.edu>

Mystery object '1991VG' is still missing.

For those who haven't been following it, 1991VG is an interplanetary object first thought to be an asteroid but later identified as 'an artificial object rotating about more than one axis.' It was tracked for several weeks as it approached the earth, finally passing beneath the south pole on 5 December 1991 at a distance of about a quarter-million miles.

Now it can't be found. According to news reports, it didn't show up at all on photographs taken just after its closest approach to the earth. And an attempt on December 12 by the Goldstone facility to locate it with radar was also unsuccessful. Another attempt will be made on December 20 using the big radar dish at Arecibo.

The following is reposted from Usenet News. Margins have been reformatted for clarity, and some extraneous material near the end has been edited out to save space.

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+ Article: 13504 of sci.astro
+ From: dfi@specklea.mpifr-bonn.mpg.de (Daniel Fischer)
+ Newsgroups: sci.astro,sci.space,alt.alien.visitors
+ Subject: The famous Dr. Steel on 1991 VG [Forwarded]
+ Message-ID: <1991Dec17.173915.29359@mpifr-bonn.mpg.de>
+ Date: 17 Dec 91 17:39:15 GMT
+ Organization: Max Planck Institut fuer Radioastronomie

+ From DIS@aaocbn.oz.au Tue Dec 17 05:49:11 1991 ...
+ ... did I get the following paper which he asked me to post to the net:

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A ROCK OR A ROCKET?

On November 6th astronomers operating the Spacewatch telescope at Kitt Peak in Arizona found what was at first assumed to be a small rocky asteroid. It was given the code-name 1991 VG. More recent observations from Chile have indicated that this body, which raised a flurry in the world's media when it flew close (on an astronomical scale) by the Earth on December 5th, may in fact be an old rocket body returning to our planet's vicinity.

Spacewatch, operated by Tom Gehrels, Jim Scotti and David Rabinowitz (University of Arizona) is a relatively small (91 cm aperture) telescope which has been fitted with a large CCD array and programmed to search for objects such as asteroids and comets which approach the Earth. They do this by letting the sidereal rotation of the Earth cause the instrument to scan across the sky, with the same area being returned to later, and again once more as a check. Any objects which have moved between scans are picked up by the software, and the

operator may then make a visual inspection of the data and calculate a preliminary orbit for the new-found object. Especially for the fainter detections many of the orbits turn out to be geocentric, a piece of man-made debris being indicated. However some very small asteroids have been discovered in this way: 1991 BA last January (the closest-ever observed miss of our planet, at 170,000 km) and 1991 TU in October (at 750,000 km). 1991 VG is the second-closest observed fly-by, at 450,000 km, or just further away than the Moon. All three of these objects were estimated to be about 5--10 metres in size, and are therefore the smallest and intrinsically-faintest items ever observed telescopically above the atmosphere.

However, 1991 VG was soon realized to be in an unusual orbit for an asteroid: its path is very similar to that of the Earth, being almost circular (eccentricity 0.08), the size of its orbit just 5\% larger than that of the Earth (so that it takes just a few weeks longer than a year to circuit the Sun), and, critically, an extremely small inclination to the ecliptic, the plane of the Earth's orbit. The latter parameter has a value (about a quarter of a degree only) which is consistent with a man-made spacecraft. Initial computations by Brian Marsden (Harvard-Smithsonian Center for Astrophysics) indicated that it might be an upper stage from the U.S. Centaur rocket which put the German Helios 1 satellite into a heliocentric orbit in December 1974, since tracing the orbit of 1991 VG back in time showed a close approach about then. A Soviet craft was also a possibility. However, as better astrometric data for 1991 VG came in it was possible for its orbit to be improved, and Marsden found that he could not identify a close approach to the Earth since the beginning of the space age, and so the `rocket' option was discounted. Since there are about a billion asteroids of this size or larger believed to orbit in the inner solar system, the chances are that some of them will have orbits very similar to the Earth, and in fact these are much more likely to be detected by telescopes like Spacewatch. From the opposite point of view a calculation of the probability of a collision by such an object with our planet indicates that its lifetime against such an event is only about 250,000 years, which means that it must have arrived in its present orbit in the astronomically-recent past. Marsden suggested that it might be an object which had spent most of its life in a so-called `Trojan' orbit, having exactly the same orbital period as the Earth but keeping 60 degrees ahead or behind of the planet at all times, until it recently slipped that mooring. Many Trojan asteroids are seen in association with Jupiter, and in 1990 a Mars Trojan was discovered.

However, close to the fly-by of 1991 VG Richard West (European Southern Observatory) collected time-resolved images of the object using the Danish 1.54 m telescope in Chile: the path taken at that time was over the South Pole and therefore out of the reach of most northern telescopes. He found that the brightness of 1991 VG varies rapidly and has a period of about 7--8 minutes, with several extremely bright flashes being detected. These are as expected for a rotating, shiny spacecraft which occasionally renders a specular reflection in the direction of the viewer. Such a short period also seems inconsistent with a natural rocky asteroid, since it is unlikely that such an object

of 5--10 m diameter could have a spin period of less that one hour without flying apart: its cohesive strength would be too low. In addition the relative brightnesses in different regions of the visible spectrum were essentially solar, warranting for a colourless object rather than a reddish asteroidal reflection spectrum. West concludes that 1991 VG is most likely an artificial object rotating about more than one axis.

This being the case it opens up a problem for dynamicists: if 1991 VG is indeed the Centaur rocket body launched in 1974 then how has its orbit been perturbed so as to bring it back to our vicinity now? One possibility is that excess fuel has escaped and therefore had a rocket-effect without being ignited. It also seems inevitable that it will also soon be claimed as being an alien spacecraft left by extraterrestrial visitors, even though science will undoubtedly be able to provide a plausible solution. If it is a rocket then 1991 VG also provides an example of mankind's ability to pollute not only his own planet and immediate space environment, but interplanetary space as well: the prevention of such pollution was the subject of a resolution of the International Astronomical Union at its General Assembly in Buenos Aires last August.

So is 1991 VG a rock or a rocket? An answer to this may be gained over the next week when Steve Ostro (Jet Propulsion Laboratory) attempts to get radar echoes from it using the giant radar at Arecibo (Puerto Rico). An attempt from Goldstone (California) on December 12th was unsuccessful. The radio reflection properties of metal are very different to those of rock, so that a spacecraft would give a much stronger echo; its structure would also affect the returned polarization. Even then the answer may not be definitive since it is known that many asteroids, like meteorites, are made of nickel-iron.

Is it so unlikely that a spacecraft would come back to Earth? In fact, using the orbit of 1991 VG prior to the recent encounter ($a = 1.05$ AU, $e = 0.075$, $i = 0.22$ deg) the chance of this object hitting the Earth converts to a lifetime of only 250,000 years (other Earth-crossing asteroids have lifetimes more like 100 million years). Increasing the cross-section to that having a radius equal to the miss distance of 450,000 km implies that an object in such an orbit would fly-by the Earth by that distance or less once per 20 years or so: pretty frequent.

[Other material edited out for length.]

Dr Duncan Steel,
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[End of Usenet News posting]

From: logdis1.sm.aflc.af.mil!davisl
Subject: This 'UFO' magazine that you are all discussing ...
Date: 18 Dec 91 02:43:03 GMT

From: davisl@logdis1.sm.aflc.af.mil ((AKA MrWizard) W. LeRoy Davis;SM-ALC/HRUC)

Could some kind soul please inform me of the details of how to subscribe to
this magazine and the rate?

advTHANKSance,
W. LeRoy Davis
davisl@sm-logdis1-aflc.af.mil

Don't ever think you know what's right for the other guy.   'DAS ENERGI'
He might start thinking he knows what's right for you.   Paul Williams

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